UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,538	09/13/2004	Holger Kunkat	AT02 0012 US	1391

24738   7590   12/18/2007
PHILIPS ELECTRONICS NORTH AMERICA CORPORATION
INTELLECTUAL PROPERTY & STANDARDS
370 W. TRIMBLE ROAD MS 91/MG
SAN JOSE, CA 95131

EXAMINER
SYED, NABIL H

ART UNIT	PAPER NUMBER
2612	

MAIL DATE	DELIVERY MODE
12/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/507,538	KUNKAT ET AL.
Office Action Summary	Examiner	Art Unit	
	Nabil H. Syed	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>21 September 2007</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-17</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   The following is a response to RCE filed on 9/21/07. Amendments received on

8/22/07 have been entered. Claims 1-17 are pending.

Drawings

2.   The drawings are objected to because conventional features illustrated in the

drawing as rectangular boxes must be labeled. See 37 CFR 1.83(a). Corrected drawing

sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to

avoid abandonment of the application. Any amended replacement drawing sheet should

include all of the figures appearing on the immediate prior version of the sheet, even if

only one figure is being amended. The figure or figure number of an amended drawing

should not be labeled as "amended." If a drawing figure is to be canceled, the

appropriate figure must be removed from the replacement sheet, and where necessary,

the remaining figures must be renumbered and appropriate changes made to the brief

description of the several views of the drawings for consistency. Additional replacement

sheets may be necessary to show the renumbering of the remaining figures. Each

drawing sheet submitted after the filing date of an application must be labeled in the top

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If

the changes are not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office action. The objection to the

drawings will not be held in abeyance.

Labels are required on the boxes because the boxes are not symbols for conventional

feature.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically
>
> disclosed or described as set forth in section 102 of this title, if the
>
> differences between the subject matter sought to be patented and the prior
>
> art are such that the subject matter as a whole would have been obvious at
>
> the time the invention was made to a person having ordinary skill in the
>
> art to which said subject matter pertains. Patentability shall not be
>
> negatived by the manner in which the invention was made.

3.   Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over by

Strong et al. (US 2003/0007473) in view of Bonneau et al. (6,577,229).

4.   Referring to claims 1, 5, 9 and 14, Strong teaches a system, as shown in Fig. 2,

comprising a local positioning system (LPS), which includes a plurality of interrogators 6

(i.e., communication stations) coupled to a plurality of antennas 5 that communicate

with each other and with tags 2 (i.e., transponders) (see Sections [0045]-[0046], and

[0054]-[0055]). Per Strong, interrogator 6 communicates with tags 2 using spread-

spectrum (i.e., an interrogator-tag protocol) (see Section [0096]); thus interrogator 6

must include a first protocol-executing means. Strong further teaches that interrogators

6 are directly connected to an Ethernet local area network (LAN) and communicate with

each other over the LAN using the Ethernet protocol (i.e., an interrogator-interrogator

protocol) (see Sections [0047] and [0054]-[0055]); thus interrogator 6 must also include

a second protocol-executing means. Though not expressly taught, Strong's interrogator

6 must have an integrated circuit and comprising at least (1) a radio frequency (RF)

transmitter and receiver (or an RF transceiver) and a microprocessor that form a first

protocol-executing means in order to communicate with tags 2 via spread-spectrum and

(2) an Ethernet interface (i.e., a second protocol-executing means) in order to

communicate with other interrogators 6 via the LAN. Strong further discloses that the

interrogator communicate with other interrogators and tag wirelessly (via interrogator A

communicating wirelessly with interrogator B and a tag; see fig. 7)

Even though The Examiner believes that Strong teaches that a reader

communication unit is able to communicate with a tag unit and further communicate with

another reader unit (via 802.11b access point 3 communicating with tag 2 and another

802.11b mobile device; see fig. 2) using a processor MAC and Strong further discloses

that the elements of the reader communication unit 3 can be duplicated via making a

separate receiving unit for tag protocol (see paragraph [0141]). Even though the

description is not fully explained but one of ordinary skill in the art would be able to

realize that Strong does include first signal processing means and second signal

processing means.

In order to further support the Examiners point of view, Bonneau discloses a

communication station (via smart card communication device (SCCD) 104); see fig. 2;

also see col. 67, lines 50-67) comprising a RF circuit 214, DSP 210 and DSP EEPROM

30. Bonneau discloses that RF circuit 214 and DSP 210 perform modulation and

demodulation using the International Organization for Standardization (ISO) Type A

smart card communication protocol (i.e., at least one transmission parameter) or the

ISO Type B smart card communication protocol (i.e., at least One other transmission

parameter) to enable communication between SCCD 104 and a Type A or B smart card

106 (see Col. 2, lines 17-37; Col. 7, lines 1-13; Col. 9, lines 39-45; Col. 10, lines 14-23

and 25-38; Col. 12, lines 51-67; Col. 13, lines 1-22, 36-38, and 46-67; and Col. 14, lines

1-57); thus Bonneau's RF circuit 214 and DSP 210 form (a) a first signal-processing

means that processes signals and enables signals to be processed when SCCS 104

communicates with a device having one type of protocol (b) a second signal-processing

means that processes other signals and enables other signals to be processed using at

least one other transmission parameter when SCCS 104 communicates with a other

device having a different communication protocol. Bonneau discloses a transmission

means connected to the first and second signal processing means to transmit and

receive signals from different devices having different protocols (via antenna assembly

216; see fig. 2)

From the teaching of Bonneau it would have been obvious to one having ordinary

skill in the art at the time the invention was made to modify the interrogator of Strong to

include two signal processing means to process the signals received from first protocol

executing means and second protocol executing means as taught by Bonneau in order

to improve the interrogators so they can communicate with devices having different

communication protocols through a single port (see col. 4, lines 37-39 and col. 2, lines

65-67).

Regarding claims 2, 6, 12, 13, 16 and 17, Strong teaches that interrogator 6

generates a 2.4 GHz field (i.e., an energy-supply signal) to power tags 2 over the air

each time the interrogation starts (i.e., the interrogator-tag protocol begins) (see

Sections [0096]-[0097]). Strong also teaches that interrogators 6 communicate with

each other over an Ethernet LAN (see Section [0047]). Though Strong fails to expressly

teach that interrogator 6's second protocol-executing means having a synchronizing

signal generating means generating a synchronizing signal each time the interrogator-

interrogator protocol starts, a message or frame generated by interrogator 6 includes an

eight-byte preamble that enables a receiving interrogator 6 to lock onto the transmitting

interrogator 6's timing on a frame-by-frame basis; thus the preamble functions as a

synchronization signal, and interrogator 6's second protocol-executing means must

have a synchronizing signal generating means. Though not expressly taught, Strong's

interrogator 6 must have an integrated circuit and comprising at least (1) a radio

frequency (RF) transmitter and receiver (or an RF transceiver) and a microprocessor

that form a first protocol-executing means in order to communicate with tags 2 via

spread-spectrum and (2) an Ethernet interface (i.e., a second protocol-executing

means) in order to communicate with other interrogators 6 via the LAN.

Regarding claims 3 and 7, because Ethernet devices only transmit when there is

information to be transferred instead of transmitting continuously, as required by some

network protocols, Strong's interrogators 6 conserve power by transmitting to other

interrogators 6 only when necessary.

Regarding claims 4 and 8, Strong teaches that interrogator 6's first protocol-

executing means handles a interrogator-tag protocol that communicates with a plurality

of tags 2 (see Fig. 2 and Sections [0045] and [0055]-[0056]). In addition, Strong teaches

that a master interrogator 6 sends a "turn on" command to a slave interrogator 6 seven

milliseconds early (i.e., as early as possible) to compensate for a seven-millisecond

delay between the master and slave interrogators 6 (see Section [0055]).

Regarding claims 11 and 15, Strong teaches that the LPS tags are considered

RFID tags (see section [41], lines 19-20).

Response to Arguments

5.   Applicant's arguments with respect to claims 1-17 have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nabil H. Syed whose telephone number is 571-270-

3028. The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Brian Zimmerman can be reached on (571)272-3059. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nabil H Syed

Examiner

Art Unit 2612

N.S

BRIAN ZIMMERMAN
SUPERVISORY PATENT EXAMINER